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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/996,809	11/30/2001	Hui-Chuan Chen	BHT-3111-215	2675

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DOUGHERTY & TROXELL
SUITE 1404
5205 LEESBURG PIKE
FALLS CHURCH, VA 22041

EXAMINER	
DESHPANDE, KALYAN K	
ART UNIT	**PAPER NUMBER**
3623	

DATE MAILED: 12/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/996,809	CHEN ET AL.	
	Examiner	Art Unit	
	Kalyan K. Deshpande	3623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *22 September 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *21-32* is/are pending in the application.

4a) Of the above claim(s) *33-35* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *21-32* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *30 November 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Introduction

1. The following is a final office action in response to the communications received on September 22, 2006. Claims 21-32 are now pending in this application.

Response to Amendments

2. Examiner acknowledges Applicants' election of claims 21-32 as per a previously set forth restriction requirement.

Response to Arguments

3. Applicants' arguments filed on July 12, 2006 have been fully considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 21-32 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 21 and 30 recites a limitation of "a return of the goods after the distribution" and "returning control operation occurs during and after vehicles are returned". It is unclear how the goods are returned after distribution is completed. For the purposes of examination, Examiner is interpreting this limitation to mean "a return of the vehicles after the distribution of goods".

Claims 23 and 26 recite a "cut-in" operation. This term was indicated as unclear in the 112 second paragraph rejection of original claim 9 and claims 23 and 26 fail to make this term more clear. For the purposes of examination, this term is interpreted to mean a "priority delivery" operation.

Claim 24 recites the terms "automatic vehicle-arrangement process and a computer added artificial vehicle-arrangement process". The meaning and distinctions of these terms is unclear. For the purposes of examination, these terms are interpreted to mean "a computer assisted vehicle-arrangement process".

Claims 22-29 and 31-32 recite the same subject matter as claim 21 and are therefore rejected on the same grounds.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 21-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barts et al. (U.S. Patent Publication No. 20020082893) in view of Nakagawa et al. (U.S. Patent Publication No. 20010047237).

As per claim 21, Barts teaches:

A method for managing transportation and distribution (T&D) of goods from one place to at least one destination, which comprises the steps of:

a) processing a plan operation for distributing the goods after accepting orders and before distribution utilizing a support T&D system, the processing step a) including the steps of (see paragraphs 26-27 and 29-35; where tools are used to develop a plan for the transportation and distribution of items from manufacturing plants to the preferred destination.):

i) establishing T&D data including customer information, distribution destination information, planned distribution time, road size, vehicle size, destination coordination, and time and distance between subsequent destinations (see paragraphs 29-35; where data used in developing an operation plan includes customer information (such as customer facility points), distribution destination information (such as termination points), route size, vehicle or carrier size (where capacity and size are the same), destination coordination (such as a delivery plan), and network facility information between nodes (i.e. time and distance between subsequent nodes);

ii) determining vehicle-arrangement for vehicles (see paragraph 128 and 135; where vehicles are transported to a mixing center where they are arranged by destination to be loaded on to car-haulers to their destination.); and

iii) generating at least a supporting T&D result (see paragraph 137; where data is used to produce level distribution of product.);

b) monitoring and controlling the distribution of the goods utilizing a distribution and returning process system based on the supporting T&D result, the monitoring and controlling step b) including the steps (see paragraphs 126 and 136-137; where

a management team monitors each event of the distribution and transportation of a product.):

i) controlling and monitoring an operation (see paragraphs 126 and 136; where a team of managers monitor and control each operation of the transportation and distribution system.);

ii) maintaining and evaluating results of the monitoring and controlling (see paragraph 137; where data from the transportation and distribution is sent to management computers, where the data is analyzed in order to determine the optimal distribution of product.); and

iii) producing at least one evaluation of the results from the monitoring and controlling (see paragraph 137; where feedback of the results is generated and captured.); and

c) analyzing the supporting T&D result and the at least one evaluation of the results of the monitoring and controlling during the distribution of the goods utilizing a transportation result management system, analyzing step c) including the steps of:

ii) managing drivers and vehicles (see paragraph 137; where the management of data is used to level the demand for staff (drivers) and vehicles (equipment).); and

iii) managing resources and energy (see paragraph 137; where the management of data is used to level the demand for staffing, equipment, and power.).

Barts fails to explicitly teach "i) managing cost, expense, benefit, and reward". However, Barts does teach the management of data in order to manage costs and expenses thereby increasing profits (see paragraph 137). Furthermore, it is old and

well-known in the art to manage cost, expense, benefit, and reward. These factors are generally managed in the art in order to increase profits by facilitating a product to its point of destination. It would have been obvious, to modify Barts to account for the management of cost, expense, benefit, and reward in order to increase profits by facilitating a product to its point of destination, which is a goal of Barts (see paragraph 25).

Barts also fails to explicitly teach the monitoring, control, and analysis of "a return of the goods after the distribution, and a return route of the vehicles" data. Nakagawa, in an analogous art, teaches the monitoring, control, and analysis of "a return of the goods after the distribution, and a return route of the vehicles" data (see Nakagawa paragraphs 78 and 83-93; where return times and return routes are included in the evaluation of the transportation and distribution plan.). The advantage of this feature is that it enables a user of the system to facilitate the distribution of product by accurately depict the costs associated with the transportation and distribution of product. It would have been obvious, at the time of the invention, to one of ordinary skill in the art to combine the feature of monitoring, control, and analysis of "a return of the goods after the distribution, and a return route of the vehicles" data taught by Nakagawa to Barts in order to facilitate the distribution of product, which is a goal of Barts (see paragraph 25).

As per claim 22, Barts teaches:

The method according to claim 21, wherein, in the processing step a), the establishing T&D data step i) includes the steps of:

a) maintaining T&D basic data and setting T&D cost data (see paragraphs 29-35; where basic data and cost data are maintained.); and

b) determining delivery requirements for ordered goods (see paragraphs 29-35; where delivery requirements, such as delivery times and destinations, are determined).

As per claim 23, Barts teaches "wherein the processing step a) includes the steps of: a) maintaining T&D basic data and setting T&D cost data" (see paragraphs 29-35; where basic data and cost data are maintained.); "b) determining delivery requirements for ordered goods" (see paragraphs 29-35; where delivery requirements, such as delivery times and destinations, are determined); "c) performing a vehicle-arrangement operation" (see paragraphs 128 and 135; where vehicles are transported to a mixing center where they are arranged by destination to be loaded on to car-haulers to their destination.); "d) performing a trip adjustment operation" (see paragraphs 132-135; where routes for the trip are optimized.); and "f) performing a vehicle assignment operation" (see paragraphs 128 and 135; where vehicles are transported to a mixing center where they are arranged by destination to be loaded on to car-haulers to their destination.). Barts fails to teach "e) performing a cut-in vehicle-arrangement operation". As discussed in the 112 second paragraph rejection, this term is interpreted to mean a priority vehicle arrangement operation. Nakagawa, in an analogous art, teaches a priority vehicle arrangement operation (see Nakagawa paragraphs 20 and 106-107; where vehicles are arranged and categorized in to priority and non-priority vehicles in order to ensure the delivery of the product.). The advantage

of this feature is that the distribution network can ensure the delivery of products by the appropriate deadlines. It would have been obvious, at the time of the invention, to one of ordinary skill in the art to combine the feature of a "cut-in vehicle arrangement operation" taught by Nakagawa to Barts in order to ensure the delivery of products in the appropriate time, which is a goal of Nakagawa (see Nakagawa paragraph 7).

As per claim 24, Barts teaches:

The method according to claim 23, wherein, in the performing step c), the vehicle-arrangement operation is performed utilizing a process selected from a group consisting of an automatic vehicle-arrangement process and a computer added artificial vehicle-arrangement process, the vehicle-arrangement operation includes developing a preliminary result (see 128, 135, and 764-796; where vehicles are transported to a mixing center where they are arranged by destination to be loaded on to car-haulers to their destination. The management team simulates distribution plans in order to determine which plan is most effective. The distribution scenarios are validated and confirmed prior to implementation.).

As per claim 25, Barts teaches "in the performing of step d), the trip adjustment operation utilizes trip assemblies selected from a group of trip assemblies consisting of multiple transfer-trip assemblies, the trip adjustment operation includes developing a comparison and confirmation before and after each adjustment" (see paragraphs 476 and 739; where the geographic build planning tool optimizes trip routes and multiple trip routes, trip time adjustments. Scenario development and implementation of all trips are analyzed and validated before implementation.). Barts fails to explicitly teach "return-

trip assemblies". This limitation was already addressed by the rejection of claim 1; therefore the same rejection applies to this claim.

As per claim 26, Barts teaches performing scenario simulations to determine the optimal distribution and transportation plan for vehicle arrangements where each scenario is validated and confirmed prior to implementation (see paragraph 451, 476, 479, 507, 725, and 729-731). Barts fails to explicitly teach the "cut-in" operation. This limitation is already addressed by the rejection of claim 23; therefore the same rejection applies to this claim.

As per claim 27, Barts teaches:

The method of claim 21, wherein the monitoring and controlling step b) includes the steps of:

a) performing an in-and-out control operation (see paragraphs 40, 159, and 729; where vehicles can be in-house transportation, contracted, or through a vendor.);

b) performing a monitoring and controlling operation (see paragraphs 27, 29-35, 280-282; where delivery conditions, such as the capacity of the delivery routes, are monitored and reported.); and

c) performing a returning control operation (see paragraphs 138-140; where the tracking portion of the system enables management to monitor all events of the distribution network, during and after the distribution.).

As per claim 28, Barts teaches:

The method according to claim 27, wherein, in the performing step a), the in-and-out control operation includes vehicles selected from private vehicles, contract

vehicles, and a combination thereof (see paragraphs 40, 159, and 729; where vehicles can be in-house transportation, contracted, or through a vendor.).

As per claim 29, Barts teache:

The method according to claim 27, wherein, in the performing of step b) the monitoring and controlling operation includes monitoring and controlling vehicles in motion and collecting delivery conditions, and reporting findings to a delivery center (see paragraphs 27, 29-35, 280-282; where delivery conditions, such as the capacity of the delivery routes, are monitored and reported.).

As per claim 30, Barts teaches:

The method according to claim 27, wherein, in the performing of step c), the returning control operation occurs during and after vehicles are returned (see paragraphs 138-140; where the tracking portion of the system enables management to monitor all events of the distribution network, during and after the distribution.)

As per claim 31, Barts teaches:

The method according to claim 30, wherein the vehicles are returned to a place selected from a group of places consisting of a place of origin and a place of delivery (see paragraphs 29-35; where vehicles are at a place of origin or at a destination point.).

As per claim 32, Barts teaches:

The method according to claim 21, wherein, in the monitoring and controlling step b), the maintaining and evaluating results step ii) includes evaluating receipt of vehicles in distribution and daily vehicle-assignment records and generating contract

vehicle results and driver reward valuation results (see 764-796; where the management team evaluates several operation performances, including receipt of vehicles in distribution, contractor efficiency, and overhead payroll expenses.).

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kalyan K. Deshpande whose telephone number is (571) 272-5880. The examiner can normally be reached on M-F 8am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz can be reached on (571) 272-6729. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

kkd

TARIQ R. HAFIZ
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600